

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application

Inventor: Shek Fai Lau et al.
Appl. No.: Division of 09/924,600
Filed: March 22, 2004
Title: Electrode Cleaning for Air Conditioner Devices

PATENT APPLICATION

Art Unit: 1724
Examiner: Richard L. Chiesa

Customer No. 23910

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.56

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sir:

It is requested that the information identified in this statement be considered by the Examiner and made of record in the above-identified application. This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56. If this is a continuation, divisional or continuation-in-part application, it is understood that the Examiner will consider all information which was considered by the Office in a parent application. MPEP §609. Such information therefore is not listed herein unless it is desired that the information be printed on a patent issuing from the subject application.

Enclosed with this statement are the following:

X Form PTO-1449. The Examiner is requested to initial the form and return it to the undersigned in accordance with MPEP §609.

X The present application is being/was filed after June 30, 2003. In accordance with the pre-Official Gazette waiver of 37 CFR 1.98 (a)(2)(i) posted at pac/dapp/opla/preognotice/idswouscopies.htm, copies of cited U.S. patents and publications are not enclosed. Additionally, copies of cited foreign patent documents and non-patent literature, items marked with an asterisk(*), are enclosed in accordance with 37 C.F.R. §1.98(a)(2), as still required. The non-asterisked items were previously submitted in an Information Disclosure Statement by applicant in a parent application (see legend at end of Form PTO-1449), from which benefit under 35 U.S.C. §120 is claimed, which Information Disclosure Statement complies with the September 8, 2000 or subsequent revision of 37 C.F.R. §1.98(a-c), as allowed under 37 C.F.R. §1.98(d)(1).

— The present application was filed prior to June 30, 2003. A copy of each cited document as required by 37 C.F.R. §1.98 is enclosed.

This statement should be considered because:

X 37 CFR §1.97(b). This statement qualifies under 37 CFR §1.97, subsection (b) because:

- (1) It is being filed within three months of the filing date of an application other than a continued prosecution application under §1.53(d);

-- OR --

- (2) It is being filed within 3 months of entry of a national stage;
-- OR --
(3) It is being filed before the mailing date of the first Office Action on the merits,
-- OR --
(4) It is being filed before the mailing date of the first Office Action after the filing of a Request for Continued Examination under 37 CFR §1.114.

— **37 CFR §1.97(c).** Although it may not qualify under subsection (b), this statement qualifies under 37 CFR §1.97, subsection (c) because:

- (1) It is being filed before the mailing date of a FINAL Office Action, a Notice of Allowance, or an action that otherwise closes prosecution in the subject application, whichever occurs first.

-- AND (check at least one of the following) --

- (1) It is accompanied by a STATEMENT as set forth in 37 CFR §1.97(e).
-- OR --
— (2) It is accompanied by the \$180 fee set forth in 37 CFR §1.17(p).

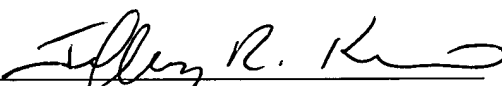
— **37 CFR §1.97(d).** Although it may not qualify under subsection (b) or (c), this statement qualifies under 37 CFR §1.97, subsection (d) because:

- (1) It is being filed on or before payment of the issue fee;
-- AND --
(2) It is accompanied by a STATEMENT as set forth in 37 CFR §1.97(e);
-- AND --
(3) It is accompanied by the \$180 fee set forth in 37 CFR §1.17(p).

X **Fee Authorization.** The Commissioner is hereby authorized to charge underpayment of any additional fees or credit any overpayment associated with this communication to Deposit Account No. 06-1325.

Respectfully submitted,

Date: March 22, 2004

By: 
Jeffrey R. Kurin, Reg. No. 41,132

Customer No. 23910
Fliesler Meyer LLP
Four Embarcadero Center, Fourth Floor
San Francisco, California 94111-4156
415/362-3800 Telephone

**INFORMATION DISCLOSURE CITATION
BY APPLICANT**

Applicant

Shek Fai Lau et al.

Filing Date

March 22, 2004

Group Art Unit

1724

U.S. PATENTS

Examiner Initial	Patent Number	Issue Date	Name	Class	Subclass	Filing Date
	1,791,338 A	2/3/1931	Wintermute			4/12/1927
	1,869,335 A	7/26/1932	Day			12/13/1926
	2,327,588 A	8/24/1943	Bennett			6/1/1940
	2,359,057 A	9/26/1944	Skinner			2/28/1942
	2,509,548 A	5/30/1950	White			5/27/1948
	2,949,550 A	8/16/1960	Brown			7/3/1957
	3,018,394 A	1/23/1962	Brown			7/3/1957
	3,026,964 A	3/27/1962	Penney			5/6/1959
	3,518,462 A	6/30/1970	Brown			8/21/1967
	3,581,470 A	6/1/1971	Aitkenhead et al.			12/30/1969
	3,638,058 A	1/25/1972	Fritzius			6/8/1970
	3,744,216 A	7/10/1973	Halloran			8/7/1970
	3,981,695 A	9/21/1976	Fuchs			11/2/1973
	3,984,215 A	10/5/1976	Zucker			1/8/1975
	4,052,177 A	10/4/1977	Kide			3/1/1976
	4,092,134 A	5/30/1978	Kikuchi			6/3/1976
	4,138,233 A	2/6/1979	Masuda			6/16/1977
	4,209,306 A	6/24/1980	Feldman et al.			11/13/1978
	4,227,894 A	10/14/1980	Proynoff			10/10/1978
	4,231,766 A	11/4/1980	Spurgin			12/11/1978
	4,232,355 A	11/4/1980	Finger et al.			1/8/1979
	4,244,710 A	1/13/1981	Burger			5/9/1978
	4,244,712 A	1/13/1981	Tongret			3/5/1979
	4,253,852 A	3/3/1981	Adams			11/8/1979
	4,259,452 A	3/31/1981	Yukuta et al.			5/15/1979
	4,266,948 A	5/12/1981	Teague et al.			1/4/1980

**INFORMATION DISCLOSURE CITATION
BY APPLICANT**

Applicant

Shek Fai Lau et al.

Filing Date

March 22, 2004

Group Art Unit

1724

		4,282,014 A	8/4/1981	Winkler et al.			5/21/1979
		4,284,420 A	8/18/1981	Borysiak			8/27/1979
		4,318,718 A	3/9/1982	Utsumi et al.			7/14/1980
		4,342,571 A	8/3/1982	Hayashi			6/14/1978
		4,357,150 A	11/2/1982	Masuda et al.			2/5/1981
		4,386,395 A	5/31/1983	Francis, Jr.			12/19/1980
		4,413,225 A	11/1/1983	Donig et al.			7/17/1981
		4,445,911 A	5/1/1984	Lind			12/15/1981
		4,477,263 A	10/16/1984	Shaver et al.			6/28/1982
		4,496,375 A	11/29/1985	Le Vantine			6/14/1983
		4,502,002 A	2/26/1985	Ando			9/2/1982
		4,509,958 A	4/9/1985	Masuda et al.			10/8/1982
		4,516,991 A	5/14/1985	Kawashima			4/25/1982
		4,536,698 A	8/20/1985	Shevalenko et al.			8/25/1983
		4,587,475 A	5/6/1986	Finney, Jr. et al.			7/25/1983
		4,600,411 A	7/15/1986	Santamaria			4/6/1984
		4,601,733 A	7/22/1986	Ordines et al.			9/27/1984
		4,626,261 A	12/2/1986	Jorgensen			12/12/1985
		4,643,745 A	2/17/1987	Sakakibara et al.			12/17/1984
		4,659,342 A	4/21/1987	Lind			4/30/1984
		4,674,003 A	6/16/1987	Zylka			4/3/1985
		4,686,370 A	8/11/1987	Blach			2/13/1985
		4,689,056 A	8/25/1987	Noguchi et al.			8/29/1986
		4,694,376 A	9/15/1987	Gesslauer			9/26/1985
		4,713,093 A	12/15/1987	Hansson			7/8/1986
		4,713,724 A	12/15/1987	Voelkel			6/30/1986
		4,726,812 A	2/23/1988	Hirth			3/26/1987
		4,726,814 A	2/23/1988	Weitman			6/27/1986

**INFORMATION DISCLOSURE CITATION
BY APPLICANT**

Applicant

Shek Fai Lau et al.

Filing Date

March 22, 2004

Group Art Unit

1724

		4,772,297 A	9/20/1988	Anzai			8/19/1986
		4,779,182 A	10/18/1988	Mickal et al.			6/24/1986
		4,781,736 A	11/1/1988	Cheney et al.			11/20/1986
		4,786,844 A	11/22/1988	Farrell et al.			3/30/1987
		4,789,801 A	12/6/1988	Lee			4/3/1987
		4,808,200 A	2/28/1989	Dallhammer et al.			11/12/1987
		4,811,159 A	3/7/1989	Foster, Jr.			3/1/1988
		4,940,470 A	7/10/1990	Jaisinghani et al.			3/23/1988
		4,941,068 A	7/10/1990	Hofmann			8/1/1988
		5,010,869 A	4/30/1991	Lee			8/11/1989
		5,024,685 A	6/18/1991	Torok et al.			6/30/1988
		Re. 33,927	5/19/1992	Fuzimura			9/15/1989
		5,141,529 A	8/25/1992	Oakley et al.			6/28/1990
		5,183,480 A	2/2/1993	Rateman et al.			10/28/1991
		5,196,171 A	3/23/1993	Peltier			3/11/1991
		5,215,558 A	6/1/1993	Moon			6/11/1991
		5,217,504 A	6/8/1993	Johansson			3/20/1990
		5,296,019 A	3/22/1994	Oakley et al.			8/24/1992
		5,302,190 A	4/12/1994	Williams			6/8/1992
		5,315,838 A	5/31/1994	Thompson			8/16/1993
		5,316,741 A	5/31/1994	Sewell et al.			5/30/1991
		5,378,978 A	1/3/1995	Gallo et al.			4/2/1993
		5,437,713 A	8/1/1995	Chang			12/1/1994
		5,484,472 A	1/16/1996	Weinberg			2/6/1995
		5,484,472 C1	2/20/2001	Weinberg			2/6/1995
		5,535,089 A	7/9/1996	Ford et al.			10/17/1994
		5,578,112 A	11/26/1996	Krause			6/1/1995
		5,601,636 A	2/11/1997	Glucksman			5/30/1995

**INFORMATION DISCLOSURE CITATION
BY APPLICANT**

Applicant

Shek Fai Lau et al.

Filing Date

March 22, 2004

Group Art Unit

1724

		5,656,063 A	8/12/1997	Hsu			1/29/1996
		5,667,564 A	9/16/1997	Weinberg			8/14/1996
		5,669,963 A	9/23/1997	Horton et al.			12/26/1995
		5,698,164 A	12/16/1997	Kishioka et al.			3/30/1995
		5,702,507 A	12/30/1997	Wang			9/17/1996
		5,779,769 A	7/14/1998	Jiang			10/24/1995
		5,814,135 A	9/29/1998	Weinberg			9/15/1997
		5,879,435 A	3/9/1999	Satyapal et al.			1/6/1997
		5,893,977 A	4/13/1999	Pucci			5/12/1997
		5,911,957 A	6/15/1999	Khatchatryan et al.			10/23/1997
		5,972,076 A	10/26/1999	Nichols et al.			9/28/1998
		5,975,090 A	11/2/1999	Taylor et al.			9/29/1988
		5,997,619 A	12/7/1999	Knuth et al.			7/10/1998
		6,019,815 A	2/1/2000	Satyapal et al.			9/11/1998
		6,042,637 A	3/28/2000	Weinberg			9/28/1998
		6,063,168 A	5/16/2000	Nichols et al.			8/11/1997
		6,086,657 A	7/11/2000	Freije			2/16/1999
		6,118,645 A	9/12/2000	Partridge			4/6/1995
		6,126,722 A	10/3/2000	Mitchell et al.			7/28/1998
		6,126,727 A	10/3/2000	Lo			1/28/1999
		6,149,717 A	11/21/2000	Satyapal et al.			12/22/1998
		6,149,815 A	11/21/2000	Sauter			11/23/1999
		6,152,146 A	11/28/2000	Taylor et al.			6/25/1999
		6,163,098 A	12/19/2000	Taylor et al.			1/14/1999
		6,176,977 B1	1/23/2001	Taylor et al.			11/5/1998
		6,182,461 B1	2/6/2001	Washburn et al.			7/16/1999
		6,182,671 B1	6/6/2001	Taylor et al.			10/8/1999
		6,193,852 B1	2/27/2001	Caracciolo et al.			5/28/1997

**INFORMATION DISCLOSURE CITATION
BY APPLICANT**

Applicant

Shek Fai Lau et al.

Filing Date

March 22, 2004

Group Art Unit

1724

		6,212,883 B1	4/10/2001	Kang			3/3/2000
		6,228,149 B1	5/8/2001	Alenichev et al.			1/20/1999
		6,252,012 B1	6/26/2001	Egitto et al.			8/30/1999
		6,270,733 B1	8/7/2001	Rodden			2/17/2000
		6,277,248 B1	8/21/2001	Ishioka et al.			1/5/2000
		6,282,106 B2	8/28/2001	Grass			12/20/2000
		D449,097 S	10/9/2001	Smith et al.			5/1/2000
		6,302,944 B1	10/16/2001	Hoenig			4/18/2000
		D449,679 S	10/23/2001	Smith et al.			5/1/2000
		6,309,514 B1	10/30/2001	Conrad et al.			11/7/1994
		6,312,507 B1	11/6/2001	Taylor et al.			2/12/1999
		6,315,821 B1	11/13/2001	Pillion et al.			1/11/2001
		6,328,791 B1	12/11/2001	Pillion et al.			5/3/2000
		6,348,103 B1	2/19/2002	Ahlborn et al.			4/3/1999
		6,350,417 B1	2/26/2002	Lau et al.			5/4/2000
		6,362,604 B1	3/26/2002	Cravey			9/28/1999
		6,372,097 B1	4/16/2002	Chen			4/14/2000
		6,373,723 B1	4/16/2002	Wallgren et al.			6/18/1999
		6,379,427 B1	4/30/2002	Siess			12/6/1999
		6,391,259 B1	5/21/2002	Malkin et al.			6/26/1997
		6,447,587 B1	9/10/2002	Pillion et al.			12/6/2001
		6,451,266 B1	9/17/2002	Lau et al.			9/25/2000
		6,464,754 B1	10/15/2002	Ford			2/29/2000
		6,471,753 B1	10/29/2002	Ahn et al.			10/29/2002
		6,504,308 B1	1/7/2003	Krichtafovitch et al.			10/14/1999
		6,544,485 B1	4/8/2003	Taylor			1/29/2001
		6,585,935 B1	7/1/2003	Taylor et al.			11/20/1998
		6,588,434 B1	7/8/2003	Taylor et al.			7/2/2002

**INFORMATION DISCLOSURE CITATION
BY APPLICANT**

Applicant

Shek Fai Lau et al.

Filing Date

March 22, 2004

Group Art Unit

1724

		6,603,268 B2	8/5/2003	Lee			12/22/2000
		6,613,277 B1	9/2/2003	Monagan			6/18/1999
		6,632,407 B1	10/14/2003	Lau et al.			9/25/2000
		6,672,315 B2	1/6/2004	Taylor et al.			12/19/2000

U.S. PATENT PUBLICATIONS

Examiner Initial		Patent Application Publication Number	Publication Date	Applicant
		2001/0004046 A1	6/21/2001	Taylor et al.
		2001/0048906 A1	12/6/2001	Lau et al.
		2002/0069760 A1	6/13/2002	Pruette et al.
		2002/0079212 A1	6/27/2002	Taylor et al.
		2002/0098131 A1	7/25/2002	Taylor et al.
		2002/0100488 A1	8/1/2002	Taylor et al.
		2002/0122751 A1	9/5/2002	Sinaiko et al.
		2002/0122752 A1	9/5/2002	Taylor et al.
		2002/0127156 A1	9/12/2002	Taylor
		2002/0134664 A1	9/26/2002	Taylor et al.
		2002/0134665 A1	9/26/2002	Taylor et al.
		2002/0141914 A1	10/3/2002	Lau et al.
		2002/0144601 A1	10/10/2002	Palestro et al.
		2002/0146356 A1	10/10/2002	Sinaiko et al.
		2002/0150520 A1	10/17/2002	Taylor et al.
		2002/0152890 A1	10/24/2002	Leiser
		2002/0155041 A1	10/24/2002	McKinney, Jr. et al.
		2002/0170435 A1	11/21/2002	Joannou
		2002/0190658 A1	12/19/2002	Lee
		2002/0195951 A1	12/26/2002	Lee
		2003/0005824 A1	1/9/2003	Katou et al.
		2003/0196887 A1	10/23/2003	Lau et al.

FORM PTO-1449 (Substitute)	US DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		Attorney Docket Number	Serial No.	
			SHPR-01361USL		Division of 09/924,600
			Applicant Shek Fai Lau et al.		
INFORMATION DISCLOSURE CITATION BY APPLICANT			Filing Date	Group Art Unit	
			March 22, 2004	1724	

		2003/0206837 A1	11/6/2003	Taylor et al.
		2003/0206839 A1	11/6/2003	Taylor et al.
		2003/0206840 A1	11/6/2003	Taylor et al.

PENDING U.S. PATENT APPLICATIONS

Examiner Initial		Application Number	Filing Date	Inventor	Petition to Expunge	
					Yes	No
	1. *	10/278,193	10/21/2002	Reeves et al.		X
	2. *	10/405,193	4/1/2003	Lee et al.		X

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document Number	Publication Date	Country	Translation	
					Yes	No
		WO00/10713 A1	3/2/2000	International	✓	
		WO01/47803 A1	7/5/2001	International	✓	
		WO01/48781 A1	7/5/2001	International	✓	
		WO01/64349 A1	9/7/2001	International	✓	
		WO01/85348 A2	11/15/2001	International	✓	
		WO02/20162 A2	3/14/2002	International	✓	
		WO02/20163 A2	3/14/2002	International	✓	
		WO02/30574 A1	4/18/2002	International	✓	
		WO02/32578 A1	4/25/2002	International	✓	
		WO02/42003 A1	5/30/2002	International	✓	
		WO02/066167 A1	8/29/2002	International	✓	
	3. *	WO03/009944 A1	2/6/2003	International	✓	
	4. *	WO03/013620 A1	2/20/2003	International	✓	
		EP 0433152 A1	12/10/1990	Europe	✓	
	5. *	CN 2111112 U	7/29/1972	China	✓	
		FR 2690509	10/29/1993	France	✓	
		JP 10137007	5/26/1998	Japan	✓	
		JP 11104223	4/20/1999	Japan	✓	
		JP 2000236914	9/5/2000	Japan	✓	

FORM PTO-1449

(Substitute)

US DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

Attorney Docket Number

SHPR-01361USL

Serial No.

Division of 09/924,600

**INFORMATION DISCLOSURE CITATION
BY APPLICANT**

Applicant

Shek Fai Lau et al.

Filing Date

March 22, 2004

Group Art Unit

1724

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

"Zenion Elf Device," drawing, prior art.

Electrical schematic and promotional material available from Zenion Industries, 7 pages, August 1990.

Promotional material available from Zenion Industries for the Plasma-Pure 100/200/300, 2 pages, August 1990.

Promotional material available from Zenion Industries for the Plasma-Tron, 2 pages, August 1990.

LENTEK Silā™ Plug-In Air Purifier/Deodorizer product box copyrighted 1999, 13 pages.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

NonAsterisked Items: Copies not submitted because they were submitted in prior application 09/924,600, filed August 8, 2001, and relied upon under 35 USC §120.